



$$\textcircled{1} \triangle AFB: AF = x_2 - x_1 = 8 - 2 = 6$$

$$BF = y_2 - y_1 = 12 - 4 = 8$$

$$AB = \sqrt{AF^2 + BF^2} = \sqrt{6^2 + 8^2} = \sqrt{100} = 10$$

$$\textcircled{2} \triangle BDC: CD = x_2 - x_1 = 24 - 8 = 16$$

$$BD = y_2 - y_1 = 12 - 0 = 12$$

$$BC = \sqrt{CD^2 + BD^2} = \sqrt{16^2 + 12^2} = \sqrt{400} = 20$$

$$\textcircled{3} \triangle ACE: CE = x_2 - x_1 = 24 - 2 = 22$$

$$AE = y_2 - y_1 = 4 - 0 = 4$$

$$AC = \sqrt{AE^2 + CE^2} = \sqrt{22^2 + 4^2} = \sqrt{500} \approx 22.4$$

$$\textcircled{4} P = AB + BC + AC = 10 + 20 + 22.4 = \underline{52.4}$$